

Our Thanks to Herbert Laboratories

We recognize with appreciation Herbert Laboratories for pledging support to the Endowment Fund for The Journal of Investigative Dermatology, which will be used to support the growth and continued success of the Journal. This support will certainly strengthen and perpetuate the partnership between the pharmaceutical industry

and basic and clinical investigators in cutaneous biology.

We salute Herbert Laboratories for their contribution to the Endowment Fund and for their continued support of clinical and investigative dermatology.

D.A.N., Denver, CO

In its first two decades, Herbert Laboratories has developed a variety of medications to help dermatologists better care for their patients. In the 1980s, we have greatly expanded our research effort to continue to meet the needs of the dermatology community. From conducting basic research to sponsoring clinical trials, over this decade we have increased our commitment to discovering and developing pharmaceuticals for dermatology.

We believe that dermatology is at the threshold of an exciting new era. Rapid strides are being made in elucidating the physiological and immunological mechanisms at work in the skin. The powerful techniques of modern molecular and cellular biology are providing researchers with new tools to probe the pathogenesis of skin disorders and the mechanisms of action of drugs to combat these disorders. In the next decades, this research should provide answers to many of the remaining puzzles in cutaneous biology and a wealth of new therapies to treat refractory skin diseases.

DISCOVERY RESEARCH

The Herbert Laboratories Discovery Research program, our major effort in basic dermatology research is focusing on cutaneous inflammation and abnormal cell proliferation. These two biologic processes are hallmarks of many dermatologic diseases, and to date medicine has had only limited success in controlling them. The best drugs will undoubtedly emerge from a basic understanding of the biochemistry and physiology underlying these processes.

The search for better anti-inflammatory agents at Herbert Laboratories is centered on phospholipases and selected enzymes of the arachidonic acid pathway that are important in the multifaceted inflammatory response. We believe new inhibitors of such enzymes will eventually occupy an important place in the dermatologist's armamentarium of anti-inflammatory drugs, and preclinical and clinical studies of such compounds are underway.

We are also conducting a major research effort to tap the full potential of the retinoids in treating disease. Although long recognized as having great promise in modulating abnormal cell proliferation, the use of retinoids has been limited because of their serious side effects. Our scientists are designing and developing retinoid compounds with minimal side effects while still retaining therapeutic properties.

With the increasing understanding of the mechanism of action of the retinoids, such as the recent cloning of retinoid receptors, and our capabilities in sophisticated molecular modeling and rational drug design, we are in an excellent position to develop retinoid compounds with significant therapeutic advantages. Progress in retinoid research will open new approaches to therapy for many skin disorders, including psoriasis, acne, and sun-induced photodamage.

The proportion of revenue, as a percentage of sales, devoted to research by our company is among the highest in the pharmaceutical industry, reflecting our confidence that a strong program of research will bear fruit in coming years in the form of innovative and useful new pharmaceuticals.

CLINICAL RESEARCH

Our Clinical Research program is already bringing therapeutic advances to dermatology. In addition to developing drugs through our own research, we have been particularly successful in licensing promising drugs from abroad. In such cases, our clinical research capabilities are still of the utmost importance, since validation of the safety and efficacy of compounds in use internationally typically requires the completion of U.S. studies that conform with all Food and Drug Administration standards. The latest products to be introduced as a result of this program include a new sunscreen effective against long-wave ultraviolet (UVA) and the first of a new class of topical antifungals.

The use of topical agents to prevent and reverse photodamage has long been a major interest of Herbert Laboratories. Our company was the first in the early 1970s to introduce a topical 5-fluorouracil preparation for treatment of actinic keratoses. Recently, we have focused on improved topical preparations to protect against UVA, which has in recent years been clearly shown to be a source of potentially serious photodamage to the skin. UVA-absorbing agents promise to be of special benefit to photosensitive patients and patients concerned with skin damage resulting from chronic sun exposure (photoaging).

The development of better drug delivery systems has also been an abiding interest of Herbert Laboratories. Research in this area recently made possible the introduction of the first erythromycin gel for the treatment of acne. Thus, this method of drug delivery promises to promote patient compliance, which is essential in achieving the desired therapeutic outcome.

EXTRAMURAL SUPPORT AND PROFESSIONAL EDUCATION

Herbert Laboratories supports basic research in universities and research institutions through fellowships and grants. The Herbert Laboratories Research Fellowship and the Eva Ljungwe Research Grant are awarded annually by the Dermatology Foundation. Our company also provides funding for investigations by clinical researchers and dermatologists in private practice.

Our dedication to dermatology includes an ongoing program of professional education, including the Herbert Laboratories Forum series, the distribution of a variety of educational monographs, a long-standing educational program for residents, the Advanced Seminars in Dermatology, and support for more than one hundred local, regional, and national organizations involved in skin care.

Herbert Laboratories is pleased to provide support for the Endowment Fund of the *Journal of Investigative Dermatology*. The Journal plays an important role in disseminating significant new findings in dermatology research. Basic and clinical dermatologic research is the wellspring of better skin care, and we are delighted to support the Journal in its important work of communicating the results of such research.

Frank P. Killey, Ph.D.

Vice President, Research and Development
Herbert Laboratories